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[SATURDAY, APRIL 6, 1839.]

POTATOES.

The potatoe is unquestionably the most valuable root cultivated by man. It is grown with little care, yields good crops, can be grown in almost every variety of soil, and its nutritive properties are not exceeded by any other root either for man or beast. Though it can be cultivated with little care, and though almost any soil will produce potatoes, there are few crops that in both quantity and quality better repay any extra attention they may receive than this root.

The potatoe, like most other cultivated plants, delights in a strong rich loam, and other circumstances being equal, such a soil will usually produce one-fourth more than one very tenacious and heavy, or very light and sandy. In new settled districts large crops of potatoes are grown in the soils that contain great supplies of vegetable mould, but experience would seem to justify the opinion that in such soils the quality of the potatoe is rarely first rate. A grass ley—clover is the best—has been found, when properly prepared and manured, to be excellent for this crop; and if the soil is rather moist than otherwise, it is considered as increasing the chances of a good yield. Countries that have naturally a cool moist atmosphere are found to produce far better potatoes than those that have a dry and high temperature. Thus Ireland, surrounded as it is by the ocean, and necessarily of a low and equable climate, is famous for its potatoes; and of this continent, the part most famed for the quality of this root is New-Brunswick and Nova Scotia, which districts are noted for the moisture of the climate. With any part of the northern or middle states, however, the fault of not having good potatoes, or not having them in sufficient quantity, must be traced to the negligence of the farmer, rather than to any deficiencies of soil or climate.

The preparation of a field for the potatoe is simple. If a grass ley sufficiently rich without manuring, a rare case with this crop, the sod may be carefully turned over, rolled down, and then the surface earth loosened with a fine harrow, in which the tubers or sets are to be planted. If it requires manuring, let the manure, and this should be long rather than short, be evenly spread over the ground; with the plough make a furrow, and into this let one hand haul the manure to the requisite width, while another drops the seed potatoes on the manure so placed in the furrow. This row is covered by the plough, and the operation is repeated till all are planted. Corn on the ley is generally preferred, and roots well manured after the corn. The first in the rotation may depend on convenience, as the turf is excellent for either.

A multitude of experiments have been made and recorded both in England and the United States, to determine the best method of planting the seed, whether in whole tubers or in roots cut into two or more pieces, called sets. The result of these experiments have been somewhat contradictory, yet they seem to have established the fact that whole tubers will produce rather more potatoes than sets, but not more than sufficient to balance the extra quantity of seed required where whole potatoes are used. There are many farmers who prefer sets altogether, and the probability is, that twenty bushels of large potatoes, cut into sets and planted with a proper number in a hill, would produce more potatoes than the same quantity planted whole, but the space of ground planted would of course be more extensive with the first than the last. Mr. Rhoades of Skaneateles, an observing and very intelligent farmer, says he would not use whole potatoes, could he have them given him, for seed; and his success with sets would seem to justify the preference.

It was once the fashion among farmers to make little mountains of their potatoe hills; but that seems to have been useless labor, and extra hilling is dispensed with. The ground after planting should be kept free from weeds, the earth stirred with the cultivator or the hoe, but after the tubers have begun to form, the plough should not be used, as it frequently cuts so deep as to disturb the young plants, breaking off the little tubers, or causing the formation of new roots, processes decidedly injurious to the crop. The general length of the vines must determine the distance at which the rows are to be planted, and this of course varies greatly in the several kinds commonly cultivated. If potatoes are planted in the rows nearer one way than the other, the rows should run north and south, that the sun may produce its proper effect on the leaves of the plant, and on the surface of the earth between the rows; and the same remark will hold good of corn or other plants, the rows of which should always run north and south, when the make of the land will permit.

When it is found that potatoes yield large quantities of balls, it is considered by many farmers, a proof that the potatoe has reached its maturity and begun to degenerate; the production of seeds in all plants being indicative of this fact. Mr. Knight, the celebrated writer and gardener, maintained the certainty of the arrival at maturity, and consequent degeneration of all varieties of plants, the potatoe among the rest, and the necessity of occasionally renewing them from the seeds, which is the process nature herself employs for preventing the degeneracy or extinction of plants.

There are few districts in our country where favorite varieties of the potatoe are not cultivated, and not unfrequently the same kind is known in different places by different names. The Pinkeye, the Sardinia, the Mecca or Chenango, the English and Irish whites, and the several varieties of the red and black potatoe, are the best known. The Rohan potatoe, lately introduced into this country from France, promises to be a great acquisition both for productiveness and quality. But we have yet seen no potatoe, that, for the table, could be compared for excellence with the Pinkeye. It cannot be considered a great bearer, though it yields well; but for flavor, and amount of nutrition, we think it unrivalled.

The production of early potatoes for the markets of our cities and villages, is becoming yearly a matter of more interest to the farmer; by practicing the mode adopted in England of selecting the earliest kinds, and then treating them in the following manner, described by Loudon, important improvements might doubtless be effected. The cultivators in Lancashire have found that there is a fortnight's difference between the ripening of potatoes grown from opposite ends of the same potatoe; that part to which the root is attached being the latest in ripening, while those that spring from the nose end, are found much in advance of the others in vigor, early maturity, and in size. Each potatoe is therefore by the gardeners divided into three parts, which are planted by themselves, and thus they ripen and are fit for the market together.

The potatoe being in its native state a poisonous plant, like many others of the tropical climates, from which wholesome nutriment may be derived, it should not be cooked until ripe, or becomes mealy. The value of a potatoe depends in a great measure on the starch it contains, and of course the nutritive matter greatly varies in the several varieties, and in the same varieties at different times. Perhaps there is no method that develops the quality of a potatoe more fully than baking. We have seen a very fine early variety, and also some superior specimens of the Pinkeye, when exposed to the heat of the oven, expand and burst like parched corn into a thousand fragments. Such roots contain little else than pure starch; and the experiments of Raspail on the nutritive action of the potatoe, shows that in such plants it is found in the most abundant quantity. Next to baking, steaming is the preferable method of preparing this root, and experience shows that it should never be given to any animal unless in a cooked state, if we would derive from it its full value.

Cellars in which the temperature is but a few degrees above the freezing point, or from 40° to 45°, are the best for roots, and particularly for the potatoe; but they keep no where so well as in pits, covered with just enough earth to keep out the frost. Light, and exposure to the air, are injurious to roots, and in pits these are excluded. To have these roots then in their excellence in the spring, enough should be pitted for use as well as for planting. Some writers in the Quarterly Journal of Agriculture, have strenuously recommended that potatoes intended for seed, should be gathered before they are fully ripened, as being less subject to failure, or to disease. But we have never known in this country any thing to justify such a course, and besides, it is, we think, contrary to the course pointed out by nature herself. The average crop of potatoes per acre in the states is not large, owing to the imperfect and careless method of culture. In Susquehannah co., Pa., in 1838, the average of 2,400 acres, was 170 bushels per acre, which we presume exceeded the average of many other sections of our country. Now in ordinary seasons, and with decent culture, the average should not be less than 300 bushels per acre; and when we remember that many instances have occurred of from 500 to 1000 bushels per acre, such an average could not be deemed extravagant. More manure and less land, would doubtless increase our potatoe crops, as well as most others.

SPRING WHEAT.

One of the earliest objects which demand the attention and labor of the husbandman in the spring of the year, in those sections of the country in which the cultivation of spring wheat has become a matter of importance, is the preparation of the ground for the seed; which should be got in as early as the nature of the soil and the weather will admit. It is but a few years since the cultivation of spring wheat began to attract notice, and it may fairly be presumed that there was double the quantity grown in 1838 than in any previous year. Though a valuable grain, we do not advise our farmers to attempt making it a substitute for winter wheat, unless in situations where the latter is liable to fail from being winter killed, or in cases where a crop of this wheat as a spring grain, would be better than oats or barley.

Spring wheat requires a rich soil, but one not made so by heavy dressings of manure applied to that crop. Pastures on which sheep have been fed or folded, fields that have been heavily manured for corn or roots, and from which such crops have been taken, are found to be the best for wheat; as manure applied fresh to the wheat crop, is apt to produce too great a growth of straw, and by lodging the grain endanger the filling of the berry. We have known excellent crops of spring wheat raised on sheep pastures, the ground being carefully and completely turned over in the fall, and in the spring the surface earth is loosened by repeated har-

rowings for the reception of the seed, without disturbing the turf in the least.

One of the greatest difficulties attending the cultivation of sping wheat, (and the same remark will apply to barley, which should also be put into the earth in good season) is found in the general wetness of lands suitable for this wheat, early in the spring, and which too frequently causes the rotting of the seed, or if succeeded by dry weather, baking the surface to such a degree that the young plant is unable to force its way through the obstruction, and of course perishes. Thorough draining is the effectual remedy for this evil, and where this is not done, every precaution should be taken to conduct the water from the field and prevent all accumulation on the surface.

The kinds of spring wheat most in estimation at the present time appear to be the Italian, Siberian, and Tea wheats: but there are numberless other varieties, either original in this country or imported from abroad, which have their advocates, and which probably possess their peculiar good qualities. The fact that winter wheats can readily be converted into spring wheats, leads to the hope, that new and superior varieties may thus be introduced to the farming public; kinds which shall combine the excellencies of winter wheat for flouring, with the certainty of growth which belongs to spring wheat, in a greater degree than any kind now known. In those districts of our country in which the worm has proved destructive to the crops, it has been found that late sowing, by retarding the appearance of the ear until the season of the fly, which fortunately seems short, is over, has exempted the crop from attack. Experiments in the central and northern parts of the state prove that spring wheat sown from the first of April to the first of May, was almost wholly destroyed; that sown from the first of May to the 20th, escaped with little injury; and that sown after, or at this time, was free from worms. In districts, therefore, where the worm is feared, it would seem to be advisable to delay as late as may be consistent with the safety of the crop, and its arrival at maturity.

Spring wheat may be considered more liable to smut than winter wheat, and it should always be brined and limed previous to sowing. The advantage of this course will be found not only in freedom from smut, but in a more heavy and vigorous growth of the plant, than without such preparation.

FLORIDA.

We never contemplate our country as it is, and reflect on its vast extent, its magnificent scenery, its fertile soil, its rapidly increasing population, and the immensity of its resources, but we find an emotion of natural pride stealing over us, which we are not particularly anxious to repress. Stretching as do the United States from the 25th to the 49th degree of latitude; from the palm groves of the sunny south, to the dark spruce forests of regions bordering on ever-during frost, our country of course embraces every variety of climate, and is capable of producing nearly all plants or fruits suitable or required for food, or necessary and useful in the demands of the most extensive commerce. Running from north to south, one of the longest rivers on the globe, but serves to measure the width of our national domain; and from the northern limits of productive soil, the very verge of eternal snows, it sweeps across the richest and most fertile body of land on the globe, and finds the sea amidst orange groves and plantations of the sugar cane. Oceans are our boundaries to the east and the west, bearing on their broad bosoms the wealth gathered by industry and enterprise, from a thousand lands. With the hardier products of the north, we mingle the more delicate ones of the south; and call the coarser grains, the oats and barley of the extreme north, the wheat and maize of the middle, and the cotton and sugar of the south, all our own. Of fruits there is the same extensive variety. In the north and middle states we find all the varieties of the apple, pear and peach; in the south the fig, orange, and pomegranate. In itself, our country embraces all that can render a nation great, prosperous or happy.

In determining the capabilities of any region, carefully kept records of annual temperature, and meteorology, are among the most valuable resources of science, as by affording the means of comparison they go far to show the natural productions of a country, as well as assist in deciding what new plants may be advantageously introduced from other regions. Such observations also aid in determining the effect such a climate will produce on the health of the inhabitants, and the general natural phenomena that are in operation to control or modify the character of the region. Thus thermometrical calculations indicated, and experience has proved, that the latitude of 45° on the Pacific is as temperate as that of 32° or 33° on the Atlantic; and the plants cultivated in the open air on the Columbia, in the latitude of Montreal, correspond with those grown in Georgia, on the Atlantic coast; making a difference of some twelve or thirteen degrees in favor of the former. The causes in operation to produce this effect are doubtless the great prevalence of the south-west winds, which are essentially modified, in their passage over the pacific ocean, before they impinge on the western coast; and to the fact, that the waters in the northern Pacific, have a constant current to the north, as the rush of waters through Behrring's straits into the polar sea, and the currents from that which pass into the Atlantic, on both sides of Greenland fully prove, thus bringing the warm waters of the equatorial regions in contact with our western shores, while to a great extent the cold waters of the polar seas are alone operative in the north Atlantic.

The only part of the United States on the Atlantic coast that appears to feel permanently the influence of temperature produced by equatorial agents, is the territory of Florida; and the peninsular nature of this district, as well as the course of the oceanic currents that wash its whole extent, give it more the character of a West Indian Island, or a district of Central America, than that of a part of the Atlantic seaboard of the United States. The gulf stream, passing from the equatorial Atlantic into the gulf of Mexico, and deflected in its course by the islands and shores of that inland sea, does not part with its heat until it has washed the western side of the peninsula, passed around the sand keys and coral reefs that mark the southern extremity, and turned north by the reefs and clusters of the Bahamas, washes the eastern shore, and fianlly sweeps off to the northeast to meet the currents from the polar seas. It is this cause, constantly operative, that renders the temperature of Florida so remarkably equable and delicious, and gives to the soil and climate, the capability of producing most of the plants hitherto considered as belonging exslusively to the tropical zone.

These remarks we have intended as merely introductory to the most complete meteorological register we have yet seen of the temperature, weight of the atmosphere, course of the winds, weather, quantity of rain, &c. in the Floridas; the register being kept at Indian Key, by Charles Howe, Esquire, in the years 1835–6 and 7, and kindly placed in our hands by H. O'Reilly, Esquire, of Rochester. In its extended form it would occupy more space than we could well spare in the columns of the Farmer; and we have condensed the tables, giving only the one for 1835, choosing this for reasons which will appear below, and the difference in any respect being so trifling as to be scarcely worthy of notice.

1835.

Months.	Thermometer Average		Barometer Average		Thermometer		range
	s'nrise	2 o'clk	s'nrise	2 o'clk	high't	low'st	
January,	67	75	29.90	29.83	82	52	30
February,	62	71	29.97	29.94	79	40	39
March,	71	76	29.94	29.91	83	51	32
April,	75	82	29.78	29.65	86	62	24
May,	77	84	29.75	29.66	87	75	12
June,	80	87	29.68	29.62	90	76	14
July,	82	88	29.67	29.60	90	79	11
August,	81	88	29.70	29.64	90	79	11
September,	79	85	29.66	29.55	90	75	15
October,	75	80	29.80	29.75	86	70	16
November,	77	81	29.94	29.82	87	61	26
December,	69	77	29.99	30.00	81	60	21

The 7th of February, 1835, was the coldest day ever known in Florida, the thermometer, as will be seen from the table, descended to 40°, and the cold proving fatal to many of the foreign plants and trees that had been introduced into the northern parts of the peninsula, or near St. Augustine. Major Whiting of the U. S. Army, (see Silliman's Journal, vol. 35, page 56,) says the oranges of Florida excelled all others in the northern markets, and two millions annually were exported or shipped from St. Augustine. But this staple of the country was cut down in one night in 1635, and trees more than a century old were entirely killed. A person who was absent at the time of the frost, could scarcely recognize the most familiar scenes, their aspect was so much changed by being divested of their chief ornament, the beautiful orange groves. It takes about 7 years to renew the orange to a bearing state. Some of the tenderer trees were injured in 1665, but the orange then escaped unhurt. In the neighborhood, and on Indian Key, and Key West, the orange and similar plants were not injured, making a material difference between the northern and southern extremities of the peninsula. We have not deemed it necessary to give the tables for 1836 and 1837, as with the exception that 1836 averaged about a degre warmer, they would have been merely transcripts of the former; so little variation is there in the annual temperature of that extremity of the Union.

The following table of the prevailing course of the winds during the year 1835, we have prepared from tables of observations made at Tampa Bay on the west side of Florida, by Capt. Bunce; at Tortugas islands also on the west side, by Alexander Thompson; at Indian Key near Cape Florida, the southern part of the peninsula, by Charles Howe, Esq.; at Key West, by the Collector of that place; at Carysford reef, by Capt. Whalton; at Cape Florida, by J. Dubose, Esq.; and at St. Augustine, by J. Redman, Esq.; the whole arranged by Charles Howe. Not having room for the whole, we have selected the observations made at Tortugas, Indian Key and St. Augustine, as being the most complete, as well as best showing the prevailing direction of the winds on the west, south and east sides of the peninsula. Time of observation morning and afternoon. We have not noted the few variable days, though they are included in the whole number of observations made at each place.

1835.

		N.	N. E.	E.	S. E.	S.	S.W.	W.	N W.	no. ob each Qr.
Winter Months	Tortugas,	16	32	11	7	6	3	1	12	90
	Indian Key,	22	13	14	13	8	0	4	14	90
	St. Augustine,	21	17	1	2	7	8	4	26	90
Spring Months	Tortugas,	4	33	14	18	5	2	1	3	92
	Indian Key,	14	2	20	17	25	2	8	2	92
	St. Augustine,	23	18	5	8	19	7	1	4	92
Sum'r Months	Tortugas,	0	6	11	16	2	3	2	1	45
	Indian Key,	1	3	46	23	7	6	2	1	92
	St. Augustine,	13	12	1	13	45	2	6	8	92
Autu'n Mo'ths	Tortugas,	8	34	15	13	1	2	1	7	91
	Indian Key,	16	19	30	8	3	4	5	5	91
	St. Augustine,	26	21	4	4	20	5	3	8	91
Res't for the year	Tortugas,	28	105	25	54	14	10	5	23	319
	Indian Key,	53	53	110	61	43	12	19	22	365
	St. Augustine,	85	68	11	27	91	22	14	45	365

These tables are interesting, as establishing the mean temperature of that part of the United States; the general course of the winds; and the several causes that combine to render that section in some respects, one of the most valuable portion of our territory; and from the equable nature of the climate, the record for one year, with but slight modifications, will serve for all. It will be seen that the whole range of the thermometer at Indian Key in 1835, (and this year as has already been stated was one of extreme variation) was only 50°, while in the north it varied according to the place of observation from 90° to 115°, which does not exceed the average annual range. It will also be noticed that at no time did the thermometer rise above 90° while there is scarce a summer at the north in which the mercury does not exceed 95°. In the interior of the peninsula, the heat is undoubtedly greater; the temperature of the shores and Keys being essentially modified and corrected by the breeze from the sea, and

the equability consequently greatly increased. One of the most striking points of difference between the Florida climate and ours, is found in the greater prevalence of fair weather during the winter and spring months. In this respect the climate of Florida is truly delightful. It appears from the accurate table of Mr. Howe, that of the 91 days of the first three months in 1836, only 12 were cloudy; the rest were fair. February, which at the north is usually marked with clouds and storms, had only one cloudy day; and March, noted with us for its capricious fluctuations, had but five days that were not fair and serene.

It is this comparatively mildness and equability of temperature, that gives Florida the reputation it has acquired, of an excellent retreat for those who find the winters of the north too severe an dformidable for their comfort or their health; or who are suffering under complaints which a low and variable temperature is sure to aggravate. When the present harassing war, which has reduced some of the fairest portions of the peninsula to a desert, shall terminate, settlements will spring up around the coast, and on the rivers that penetrate the interior, and the orange and the sugar cane will supplant the pine and the palmetto, that now hold possession of the places offering the greatest inducements to settlement and culture.

[CONCLUDED NEXT WEEK.]

HORSE DISTEMPER.

The horse is one of the most valuable of the animals that have been subjected to the dominion of man, and he is at the same time one of the most liable to injury and most subject to disease. To some complaints he is subject at all times; while there are others that appear in some unknown manner to be connected with the season, and which make their attacks on animals at certain periods of the year almost exclusively. Of this kind is the disease known as the *catarrh, catarrhal fever, influenza*, but by farmers generally as the *horse distemper*, and which prevails more at this season of the year than any other. This disease is sometimes though not often fatal, unless injudicious measures are adopted in its treatment, but it is always troublesome, incapacitating a horse for labor for a long time, and as it is contagious, and its appearance in the stables, is in most cases, a signal that it will extend to all the animals exposed, unless the diseased one is removed at once, we have copied an account of the disease from the work on the horse by Mr. Youatt, of the Veterinary College, London.

"It usually commences, like inflammation of the lungs and fever with a shivering fit, to which rapidly succeed a hot mouth, greater heat of the skin than is natural, heaving of the flanks and cough. The membrane of the nose red, and sometimes bordering on a livid hue. From the commencement of the disease there is some discharge from the nose, at first watery, but soon thicker, and containing flakes which adhere at all times to the nostrils. This discharge soon becomes mattery and offensive. The glands of the throat and under jaw become enlarged; the membranes of the nostrils and throat are inflamed and tender; food is neglected and water is refused, parti ularly if it be cold. The horse sips and slavers in the pail, and coughs if he drinks. The cough is sometimes severe, and the horse exhibits symptoms of great suffering during its continuance. Great weakness speedily follows these symptoms, and the animal supports himself by leaning against the sides of the stable. The legs generally swell, and enlargements appear in the chest and body. The pulse rises to sixty or seventy, while its character is depending on the violence of the disease."

In cases that are severe or terminate fatally, 'streaks of red run through the lividness of the nose, the legs become cold, the countenance haggard, the breath is offensive, indicating ulceration of the lungs, the discharge from the nose bloody, the evacuations loose and slimy, and sometimes bloody, and the animal is speedily destroyed.' At other times, in a few days, the cough gradually ceases, the swelling in the glands of the throat swell less, the discharge from the nose assumes a more healthy form, and the animal is able to eat and drink with great ease. In such comparatively mild cases, the horse soon recovers his flesh and strength, and is able to resumes his labors; but where the disease is severe, and inflammation of the lungs, or suppuration of the glands of the throat take place, if the animal is saved a long time must elapse before he is fit for labor.

When it is discovered that a horse has the distemper, he should at once be separated if possible from all others, in order to lessen the chances of a spread of the disease. If the horse is in the inflammatory stage of the disease, bleeding is indispensable, but not till faintness is produced. It would be better to bleed again if the pulse continues quick and strong, than to weaken the animal by a too copious bleeding at once. With farmers, however, the disease in its first stages is rarely noticed, and it is not until the cough, running at the nose, and swelling of the glands, show the progress the disease has made, that its presence is suspected. At this time the horse usually refuses to eat, or drink; the nose has lost its inflammatory redness; and as he is losing flesh as well as strength, bleeding had better be avoided. Should the horse be costive, care must be taken that the bowels are evacuated by suitable purgatives, and aloes in doses of two drachms either in a ball or solution, is good for this purpose. While the fever is high, sweet spirits of nitre may be given, the dose will be about two drachms. A flannel cloth or wrapper around the head and throat will be useful, though air must be freely admitted to the stable. In severe cases of swelling of the glands, blistering of these places is sometimes resorted to with success. A discharge from the nose is a favorable symptom in the distemper, and it should be promoted, by hot mashes frequently put in the manger, and some use substances that emit pungent ammoniacal fumes, to promote the discharge from the nostrils. Continual care must be taken to support the strength of the animal; and many valuable horses are annually lost from what may be considered pure carelessness in this respect. The horse cannot eat dry hay or grain, while his throat is so swelled, and hay or grain steamed or boiled, green grass, or carrots cut fine, should be provided. In long continued cases, mashes made of bran or oat meal, must be given; and if he obstinately refuses to eat, gruel of proper consistence may be turned down his throat. If he can be kept up till the swelling of the glands subside, or external suppuration takes place, they will generally recover, and the great object in the treatment should be to prevent the entire prostration of strength. When the disease terminates fatally after the stage of swelling is passed, it is by inflammation of the lungs,or putrid fever, and when either of these supervene on the already exhausted animal,there is little hope of his again getting up.

PROPAGATION OF FRUIT.

One of the quickest modes of procuring fruit of known excellence is by the processes of grafting or inocculation; indeed there is no other way in which we can be certain of obtaining the fruit desired, since whether propagated from seed or the stone, in a great majority of cases the tree produced will be found to differ from the original. Grafting consists in inserting a branch of the tree whose fruit we wish into one of another or inferior quality, thus changing in this way a crab apple tree into one of the golden pippins, the thorn into the pear, or the worthless wild cherry or plum, into the Waterloo or the Bolmar. Grafting is performed with the greatest ease on small trees while in the nursery, but it may be practiced at almost any age of the tree, if the circulation is active, and the health of the tree good. More care is, however, required when the tree is large, as the wounds made in taking off the limbs are necessarily more extensive, and are apt to rot into the tree deeply before healing over; and hence as soon as the tree is in fruit, so that its quality can be determined, the operation of grafting should be performed, if it has been delayed till that time, and the fruit needs change.—Grafting plum trees of considerable size has with us been attended with some danger to the original stock, but when the tree is young, it can be grafted without difficulty. The spring of the year is the time for this operation, the scions or grafts being selected in February or March, before the sap ascends; though where the trees from which shoots are to be taken are at hand we have cut and inserted them at one. Grafting should not be performed too early, or the circulation of the sap may not be sufficient to save the scion; nor should it be delayed till a late period, as the scions will dry too rapidly, and the wax not close the wounds as effectually as when used at the proper period.

Inocculation is performed by inserting a bud from the tree, the fruit of which it is intended to propagate, under the bark of another tree of the same variety or family, and this bud uniting with the stock to which it is applied, the original one is cut off, leaving the bud to become the tree. This process is extensively adopted in nurseries, and in propagating the more delicate kinds of fruit, such as peaches, apricots, plums, and cherries, is preferable to grafting. Perhaps in all cases where it is practicable, and inocculation is generally so until the bark becomes so thickened as to forbid it, this method of propagation is the best, since, should the bud fail, the injury to the branch or tree is trifling, and the inocculation can be repeated, or grafting resorted to. In one of the volumes of tne Philosophical Magazine, is an article on grafting, or rather inocculation, from which we extract the following:

"A common method of inocculation is by making a transverse section in the bark of the stock, and a perpendicular slit *below* it; the bud is then pushed down to give it the position which it is to have. This method is not always successful; it is better to reverse it, by making the vertical slit *above* the transverse section, and pushing the bud upward into its position—a method which rarely fails of success; because as the sap descends by the bark as has been ascertained, and does not ascend, the bud thus placed above the transverse, receives abundance, but when placed below it, the sap cannot reach it."

This system is philosophically correct, and we can see no reason why it should not succeed; and perhaps it has already been practiced in this country, though it cannot be common. But whether grafting or inocculation be preferred, farmers should never rest satisfied with any thing short of an adequate supply of superior fruit, when the means of securing the supply are already in their hands. Where orchards are to be commenced anew, fruit trees from some of our nurseries should be procured, as the fruit in these cases is already known, and all delay or uncertainty is avoided.

WHEAT WORM ABROAD.

In the February number of the British Farmers' Magazine, is an elaborate review of the grain market in Europe, the annual product, and the causes that have conspired to produce the present scarcity of wheat in England. Among other reasons of the partial failure of the crop, is the following, by which it will be seen that the worm from which our wheat growers are apprehending so much, is not unknown in other parts of the world:

"Another drawback to the productiveness of the wheat crop in 1838, to which we have not adverted, but which is of sufficient importance to demand especial notice, still remains to be observed. We allude to the injury done to the wheat by the attacks of an *orange colored maggot*. The ravages of this insect in the midland counties, especially those bordering on Wales, along the western coast, and in the south western coast of England, have been very extensive. Several careful observers have estimated the deficiency in the yield occasioned by this insect at one-fourth part of the crop affected, amounting to two-thirds of the whole. Its attacks were mostly confined to one side of the ear, and to that part of the crop, which, but for this visitation would have turned out the best; the later portions having in most instances escaped injury from this source."

Thus, allowing the wheat crop of Great Britain to equal one hundred millions, the loss of one-fourth of two-thirds of the whole, would not be less than sixteen millions of bushels from the worm alone, a deficit which must be severely felt. From the description of the worm, and the manner in which it attacks the ear, it is clearly identical with the one which has already done so much injury here, and as it has been known in England for years, it is not improbable that we owe its introduction here to the importations of wheat from that country.

COMMUNICATIONS.

MANAGEMENT OF SHEEP---NO. 4.

Mr. Tucker,—*Protection of sheep is a means of saving provender.*

It is a matter of much regret to me, since all the rest of my positions are based upon facts, that I have none to offer of a decisive character, the result of actual experiment, to support the one now in question. But upon every reasonable mind I hope to produce thorough conviction, without them.

All of you, who are practical farmers, are well aware, that horses, cattle, and sheep, will consume more food in severe, or moderately cold weather, than when it is otherwise. No matter whether any question this, for it is an incontrovertible fact. Although making no pretension to deep philosophy, to me the cause of their doing so is very apparent. Nature is always exerting her utmost with every thing from man down to the crawling insect, to promote its physical welfare for the preservation of the principle of life. Hence, when any animal is exposed, or subjected to extreme hardship—and our climate is the greatest natural one—nature prompts it to partake of greater quantities of food in order to combat, or counteract it; therefore, inasmuch as sheep are exposed to greater hardships, from the severity of our winters, without protection than with it, the inference is legitimate that they consume more provender with a view to their welfare. Were I to go on and philosophise to the end of the chapter, it is apparent to me, the jist of the whole would be simply what is here briefly stated: consequently further speculations, as to causes, are superfluous.

I *do know*, however, that my sheep consume less hay since they were protected, but from want of actual experiments I am unable to say precisely how much; I think it is a safe estimate to say, at least, one ton to the hundred. But besides this, is the very important item of grain. Under the head—protection will tend to prevent disease—it was stated, that it was my practice, for several years before protection was resorted to, to feed—except to several hundreds of the best wethers—half a bushel of cleaned oats, or that quantity of oats and shorts intermixed, to the hundred. This has been abandoned, except to my lambs, and I reiterate the fact, that the general condition of my flock is superior to that when grained! and yet it will not do to say, there is no virtue in grain, for we all know better; but the stubborn fact must be admitted, that there is *more virtue in protection* than in the quantity of grain used, in order to maintain good condition.

Hear what that *chief of shepherds*, Mr. H. D. Grove, of Hoosick, Rensselaer Co., has to say; and I hope he will not consider the title conferred upon him as mere flattery, but a merited compliment to his eminent knowledge on the subject of sheep husbandry in all its various branches. He says, "that protection is almost as necessary to the *health* and *good condition* of sheep, as food itself; and for this reason stables for that purpose are of great benefit. Not only do sheep do much better, but it is ☞ *a saving* of *fodder* and *manure*." This testimony is entitled to great weight, inasmuch as Mr. Grove was from early life a shepherd in his native country, Germany, where sheep husbandry is more thoroughly understood and practised, than any other part of the world. I could adduce other testimony, but after quoting from such unquestionable authority, I deem it unnecessary, and will therefore proceed to particularise the items of *increased profit* which I have derived from protecting my flocks.

The first I shall speak of, is derived from *the saving* of the *lives of sheep.*

In No. 2 of this series, you were informed that the losses averaged about 70 for a term of years before my sheep were sheltered: and, that this occurred when the number varied from 900 to 1400, averaging, say 1200. Since protection, the number has averaged 1800—an increase of 50 per cent—consequently, if no shelters had been provided, the loss, in that ratio, would have amounted to 105 annually, and of course, for four years to 420. The total loss during the foddering seasons, of this period of time, including the current one—which is the fourth of protection—to this time, 10th March, is 122—this, deducted from 420, will leave 278. This shows the number of sheep saved by means of sheltering, and considering how many very good sheep were swept off by exposure, two dollars per head is a low valuation; at this price, my gain in this particular, is $556,00. I candor I must state, that nearly all the sheep I have lost for the last three winters, and also this, were of a very indifferent character; consisting of small and late lambs, and old ewes which were retained on account of superior fineness of wool, for the sake of rearing their lambs; the death of a good sheep is a rare thing, whereas, exposure cut down good as well indifferent.

The next item of profit, is from *improvement of fleece;* and, as I gave you no facts, but theory, for support of this position, I lay before you now, two invoices exhibiting the sorts of two clips; the first being shorn the year *before* protection, and the other the following year *after.* This will establish the proof, that sheltering will improve the quality of the fleece, and enable me to get at the item of profit arising from it. I sheared about 200 more in 1836 than in '35, and those sheep I disposed of during the interim of the clips, consisted, mostly, of those inclined to age, and not altogether the coarsest. The sorting was done at that immense manufacturing establishment, the Middlesex Co., at the head of which are the Messrs. Lawrence of Boston; and considering the wonderful skill and accuracy which distinguishes every department or division of labor, no mistake can reasonably be ascribed to the sorters.

Clip of 1835.		*Clip of* 1836.	
3 lbs.	wool.....extra.	12 lbs.	wool.....extra.
62½ do	do .....prime.	186 do	do.....prime.
743 do	do.....1st.	1470 do	do.....1st.
1092 do	do.....2d.	1169 do	do.....2d.
1058 do	do.....3d.	879 do	do.....3d.
260 do	do.....4th.	199 do	do.....4th.
72 do	do.....5th.	37 do	do.....5th.
12 do	do.....6th.	9 do	do.....6th.

Some few lbs. of *fribs* and *listing* appear in the original, but are of no consequence here. You will observe the difference in quantity of the four first sorts of the clip of '36 over that of '35, viz: 9 lbs. more of extra—123½ lbs. of prime—727 lbs. first—77 lbs. of second—in all, 936½ lbs. Making a fair distribution of the wool of the 200 sheep above mentioned, for the price of each quality is designated in the invoices, the gain amounts to about $120. I will be moderate, and claim a gain of only two cents a pound for increased value, and as my clips have averaged for the last three years, about 4,800 lbs., the whole gain would amount to $288.

The next item—derived from *increased weight of fleece*—is an important one. In my last, particulars were given, and the aggregate increase of the last three clips was stated to be 1113 lbs. The average sales of my wool, during this time, was made at 56 cents per lb.; this is low, but you will not forget the depression of prices last year, but particularly the one previous.—Well, at this price the amount is $623.

The next is from *increased number of lambs.* I will not trouble you with a long statement, showing the number of lambs lost and reared before protection, for I am almost ashamed to do so. The cause of such losses was assigned in my last, viz: from the feeble condition of the ewes about the time of folding. By reference to my books, I find that the increase of lambs since protection, from an equal number of ewes, averages about 70 each year; so for three seasons, the gain is 210; which, at the time of weaning, I shall value at the low price of one dollar per head—although double that price would not have purchased them—therefore the gain from this source is $210.

In consequence of not having made any experiments, as you have already been informed, I am unable to determine how much of *hay* has been saved by means of protection; although positive that it constitutes an important item; therefore shall pass it by without taking it into account. But as regards *oats*, something more decisive is known. The quantity fed to my sheep for several seasons before they were sheltered amounted, each year, to about 1000 bushels; and this you will recollect to, when the number averaged 1200. Without entering into further particulars, I will only assure you that the saving of grain exceeds in quantity 500 bushels each year; and this being the fourth of protection, would make 2000 bushels; therefore as oats have averaged for several years past, 37½ cents per bushel, the sum saved is equivalent to 750 dollars.

In justice to myself, the important item of *manure* should be noticed, especially, if all estimate its value as highly as myself; but in my next, when my barns will be spoken of, this will receive further attention, for without it, some of you may think it *queer* how protection can operate to *save* manure. With a view of bringing all the items of gain, or profit, before you so as to be seen at a glance, I will recapitulate them:

From saving of life,.....	$556,00
From improvement of fleece,.....	288,00
From increased weight of fleece,.....	623,00
From increase of lambs,.....	210,00
From saving of grain,.....	750,00
	$2427,00

You will not forget, that in regard to increase and improvement of fleece, as well as increase of lambs, the above table embraces only three years; that of saving of life, and of grain, four years. The calculations may seem dubious to some of you, my brethren wool growers, but if any doubt, I can assure you that nothing is set down in fiction, but every statement is corroborated in my books and invoices, which you are at liberty to see by calling upon me, when other testimony can be adduced, if necessary.

With a view of producing perfect conviction that protection is the most important of the *improved means*, in order to reap increased profit from the investment of capital in wool growing—which I alluded to in my preliminary remarks—your attention is called to the following:

I will take my flock at what the number has averaged for several years—say 1800—and value them at 4 dollars per head, at which price it is very doubtful to *me*, considering age and quality of wool, whether they could be replaced, and they would amount to the sum of $7,200. In addition to this, is the cost of sheds or barns—say $1000—which would make $8,200. Seven per cent interest upon this for 3½ years, would be $2,009; paying, you perceive, the interest of capital in sheep, and buildings, and an overplus of about one and a half per cent. per annum. Leaving this calculation out, and the expense of buildings for protection has been repaid, leaving an excess of $1,427.

I did intend to make a *prospective* estimate, showing the profit of 100 sheep, including increase, &c., for three years, which would impress with great force, how much we fail to pocket by losing that number, or in that proportion; but I think you have already enough for your *pockets* to digest, and will defer it to another time.

My next will conclude my remarks on this important subject; other matters and things appertaining to management of sheep will follow.

L. A. M.

Lansing, Tompkins Co., N. Y.
March 11th, 1839.

ON CUTTING TIMBER.

Mr. Tucker—As the old prejudice in favor of cutting timber in the winter, is giving away to one for cutting it in summer, where durability is required, I will state what has been my practice for a number of years, and I will endeavor to give you my reasons for it in such a manner, as that my brother farmers can understand me, although it may not be very scientific.

I cut all my rail timber either in the month of June, or August. My reasons are as follows:—All know that the greatest circulation of sap, so far as regards the elaboration and formation of wood and leaves take place in the months designated, being what is called the first and second growth. We also know that the sap first as-

scends through the wood to the extremities, buds, or leaves, as the case may be, where it is elaborated, and then descends between the bark and wood to the place of concretion, or where it becomes fixed, and thereby increasing the size of the tree, or plant. During the two seasons I have mentioned, the bark parts easily from the wood. My theory is this, that when sap has been elaborated and has passed to the outer part for descent, that there is less in the center of the tree than at any other period. Yours respectfully,

PALMYRA FARMER.

SOWING BEET SEED.

MR. TUCKER—The cultivation of mangel wurtzel and sugar beet is now receiving very general attention, and should be well understood by the agricultural community. These seeds are very liable to failure from want of proper preparation before sowing. It should be put into soft water and stand in a warm place, (say near the kitchen fire,) for two or three days, in order that it may soak sufficiently to soften the hard shell or pericarp; and if, after the water is drawn off, the seed is rolled in plaster it will be all the better. Mr. Wm. Garbutt of Wheatland, was about the first one who introduced the cultivation of the mangel wurtzel in this section, and he considers it more certain and valuable than any other root crop. On visiting his farm last summer, I was struck with the fine appearance of his crop, especially as the season was considered very unfavorable, and much complaint had been made respecting the failure of seed, &c. Mr. G. gave me some account of his manner of preparing seed and cultivation, a memorandum of which, made at the time, I have mislaid. One incident which he related, fully proves the necessity of preparing the seed. After he had put his seed to soak last spring, there came on rain which prevented his sowing for (I think) about a week, in which time it had *sprouted*, to such a degree that he was apprehensive that it would be much injured in sowing. He therefore sowed it rather thicker than usual, and consequently had not seed enough *prepared*, to sow all the ground he intended. He then took some of the same lot of seed but *unprepared*, and sowed the remainder of the ground, supposing as the ground was moist, there would be no great difference. But to his surprise, the *prepared* seed came up quickly and much too abundantly. while the *unprepared* came up slowly and so thinly that he took plants from the other part of the ground and transplanted into this.

If Mr. Garbutt would favor your readers with the results of his long experience in the culture and use of this root, I believe he would benefit many of his brother farmers. M. B. BATEHAM.

Rochester Seed Store, March 30th.

NEW APPLE TREE WORM, &c.

MR. TUCKER—I have observed the summer past for the first time, a worm or caterpillar in my orchard, which I have not seen noticed in the agricultural publications, nor have I conversed with any one who has observed them. They hatch out about the first of August: they are placed by the parent on the under side of the leaf, and the whole brood, who generally number about fifty, commence stripping their domicile of the pulp and leaving the leaf with the skeleton fibres; from the first leaf they travel to others, parting company, when about six of them take another leaf; by this time they are able to trim the leaf of all its fibres, except the centre stem; after this each one sets up business for himself, and seems wholly intent upon filling his nasty maw; they are very voracious, and will trim out a tree in a little less time than any other tribe I have seen.

When full grown they are about 1½ inch long, with 6 pairs of legs, a broad red shield over their heads, and their bodies surrounded with rings of red projections, or nipples, out of which grow a tuft of straight bristly black hairs, and altogether are as disgusting and ugly a lookingcustomer,as any that annoys that *bimanous bipedous worm*—man.

They form no web on the tree, but at the completion of their wonderous work, flee to some retired place and go into the cocoon state, as I have proved by confining some of them in a glass jar, where I mean to imprison them till I find out who their progenitors are.

There is only one saving clause in our favor in their nature and constitution, and that is, that a smart blow with a small rod readily brings them to the ground at any period of their growth, except the first stage, and I could never discover that they find their way back again.

Their excretions are enormous; three or four colonies on a tree will fairly cover the ground. I have also occasionally observed for several years a worm on apple trees of very singular appearance. It is the mammoth of the species; they are when at full growth three-fourths of an inch in diameter, and full three inches long; they are rather sluggish, and their track is not marked with such desolation as the first described. I have them also in cocoons, which are as large as a hen's egg. When they began spinning, I fancied that I had found a new kind of silk worm, that was going to make me a pair of stockings or gloves at any rate, but the fibre turned out a harsh wiry article, about as coarse as human hair.

This year has been prolific with insects-the heat and drouth has developed the whole kingdom in myriads from the musquito the blind beetle, and some I believe that have lain in chrysalis since the fall of man, for there are half a dozen new pests added to the fearful list,—curculio, wheat worms, caterpillars, apple tree worms, grape worms, hop worms, black bugs, and yellow bugs, *id est genus*, ringed streaked and speckled.

Speaking of curculio—I this year came into the possession of premises on which was a very fine lot of cultivated fruit, but the former possessor said the plums never bore; I at once suspected the cause,and watching the young fruit closely, on the 2d day of June discovered the marks of the curculio. I instantly commenced operations on two of the smallest trees with a sheet ripped in the centre half way, and two lads to hold up the corners while I jarrred the tree with my hands, and catched and killed the scamps; this I followed up a week or ten days twice a day; these trees had as much fruit as they ought to bear; while the others would not average one dozen each. Fire and sword is the only radical cure for these depredators; you must either yard your hogs for two months under the tree, or you must pick up all the fallen fruit and burn them, thereby destroying the progenitors of future colonies.

POMUS.

CULTURE OF PARSNEPS.

MR. TUCKER—In looking over the 4th vol. Gen. Far. No. 4, I noticed directions for raising parsneps, which appear to have been copied from Memoirs of the Mass. Ag. Society. It is recommended to sow the seed soon after it is ripe in autumn that the plants may get strength to withstand the winter and come on early in the spring.

I do not know where that society obtained their information on the simple subject of raising this valuable root; perhaps from France or some of her adjoining islands —we are not informed where. But if there is a Yankee in New England that loves parsneps as well as I do, and has ever raised them in perfection, he must know at least, that it is unnecessary to sow the seed either early or late in autumn to insure a good crop. My experience, both in New England and in this state, has fully proved this.

I have more than once tried the experiment of sowing seed of the same year's growth, in autumn, and have had fine looking plants when the spring opened—but they have invariably run up to seed in the June following.

I should like to know if any of the readers of the Farmer have succeeded in such an experiment any better than I have. Perhaps I have always sowed the seed too early; but I cannot see that any advantage is to be gained by putting the seed in the ground in the autumn. If sowed early, the plants run up to seed in summer—if late, unless the soil is very light, and rendered soft by manure and previous culture, the early spring rains and sun bake the earth and prevent the seed from growing, as readily as in ground newly made up, and nature's seed time observed in planting.

I have also found by experience that very early sowing in spring is not the best; though it produces generally the largest root—they are more sticky and tough, and not as pleasant tasted as when sown later. My rule is always to sow my parsneps when I plant my corn, about the 8th or 10th of May, and in good deep rich soil, never fail of having an abundant crop.

For transplanting the parsnep the same writer gives directions equally well calculated to mislead anddiscourage the inexperienced cultivator. He admits the opening a furrow 6 or inches deep, laying the plants in it regularly 8 or 12 inches apart, taking care not to let the roots be bent, and that the plants stand upright after the earth is closed about it—which should be done by a person following the planter with a hoe. Now if the writer had even practiced his own lesson, he must have known that his directions not to bend the root, could not possibly, by his process, be complied with—that a root 5 or 6 inches long—a mere fibre, could not, in this way, be made to stand upright after closing the earth around it with a hoe. Its first position by laying in the furrow must be a horizontal one, which the after process of covering could not remedy. He says "drilling in parsneps is a bad method, as the ground thereby becomes so bound as not easily to admit the lateral roots to fix or work in the earth, and the plants must be small and never attain their proper size." I disapprove altogether the transplanting of parsneps or carrots, unless it be to fill up vacancies that occasionally happen in the field, because it occupies too much time and does not pay for the labor in a field crop—though the gardener may do it to some extent profitably. Whenever I have considered it expedient to transplant either of them, I have found the usual way of drilling them in, the most easy and expeditious, and the only one to obtain large, straight and handsome roots. An ounce of practice is better than a pound of theory. OBVIOUS.

Buffalo, Feb. 15, 1839.

Twelve Hundred Bushels of Wheat.

We beg of the western farmer who raises his fifteen hundred or two thousand bushels of the same article, annually, not to smile because we name this, as a great amount to be raised in a township four miles square the past season. Our soil was *once*, perhaps, as fertile in this article as his, for those who in early days subdued the forests of hereabouts, assure us, that it was not unusual to gather forty bushels from an acre, in our valley and on our hills. There have been two causes why its culture was for a time abandoned, with few exceptions. One, that the land had become too much exhausted to produce a decent crop; second, that other branches of agriculture, with the cheapness of *western flour*, have caused many to yield all attempts in its behalf. But we have learned wisdom from experience, as our caption intimates, and the past season, commenced doing, on a small scale, what our grandfathers did on a large one, raising our own bread. We are satisfied that this is the cheaper, *safer* way, and next season we expect to increase our 1200 in a rich per centage, and eventually raise enough, and more than enough for our supply.—Shall we tell how it is done? Here, as in other places, *most farmers have minds of their own*, and ways of their own. But firstly, our soil, clay, clayey loam, based on lime-stone. This soil, in most cases, is well ploughed, manured, and planted with corn. The following spring it receives the wheat after being *thoroughly* ploughed. *Pulverization* is highly important to the wheat crop.—In some cases the manure is not applied the year when the wheat is sown. It is probably the better way to put it on abundantly the previous year and have it well in-

corporated with the soil, by the *thorough* hoeings of the corn crop, and the ploughing, preparatory to wheat.—Some plough in their manure, the spring they sow, and others take yard litter and spread it on the surface after the harrowings are finished. We raise but little winter wheat, spring being decidedly a surer crop. The quantity of seed varies from one and a half to two bushels per acre, and is prepared by most farmers, by soaking ten or twelve hours in lime and liming. Plaster is sown on when the blade fairly appears, a bushel per acre. We have also sown it when the wheat was in blossom and found a *good* effect. The Italian is preferred to other varieties. We soaked ours, last spring, in lime for 12 hours, (though this lime was much weaker than that used for common wheat,) and found no ill consequence. Wheatfields in this town yield some twelve, some twenty-five bushels per acre, in proportion as they are tilled. The average was probably about seventeen and a half bushels. We have asked *many* of our farmers this winter which they consider their most profitable crops.—They answer, with one or two exceptions, *wheat* and corn, doing so after counting the profit and cost of *all* their crops.

The culture of wheat possesses advantages beyond, merely, the present harvest. The thorough system of culture to which it invites, leaves the land in much better condition, than when sown with oats or any thing else. For the three years following the wheat crop, it will probably produce one-third, in many instances one-half more grass, or grain, for having been benefitted in this way. It is, taking all things into account, one of our *best* crops, and we have no doubt, whatever others may imagine to the contrary, that Berkshire, yea, "old Massachusetts," will eventually supply her growing population with bread, *from the finest wheat, raised on the own soil.* She has only to go forward to do it, and when has she started forward and turned back?

What is the average produce of wheatfields at the west, indeed, in all sections of our country? What are the processes by which this crop is raised every where? We should like to know. W. B.

Richmond, (Mass.) March 11th, 1839.

On Wintering Sheep.

Mr. Tucker—To winter these animals in such a manner as to have them in good condition in the spring, requires careful management on the part of the farmer. It is my opinion that this can be best effected when they are kept by themselves, or separate from other stock.—It is important that they should be sheltered from our autumn and winter storms which not only effect the health of the animals, but materially injures the quality of the wool. When sheep are allowed to run with cattle, they are often injured, either by being kicked or hooked, and beside this danger, the wool becomes filled with seeds from the hay, which not only renders the sheep uncomfortable, by constant irritation, but greatly reduces the price or value of the wool. Although sheep are not very expensive stock to keep, yet like every other kind, to make them profitable, they require constant care. From the severity and length of our winters in this latitude, sheep require some other food to be given to them in addition to hay. The principal object in keeping sheep is for the wool; therefore, any thing that effects the quality of it, either favorably, or otherwise, becomes important as connected directly with the object of their propagation. When sheep are kept entirely upon hay, they are very apt to become costive and feverish. In this case perspiration is checked, and the color of the wool is changed according to the severity of the disease. Where it continues long, the wool becomes yellow, or rather the yolk upon it assumes this color, is less fluid, and the fleece becomes "cotted," as the term is, or the sheep is said to be hide-bound. This greatly reduces the value of the wool, and when allowed to continue until the time of bringing forth lambs proves still more detrimental, as ewes in this case never have a good supply of milk. When our winters are so open that sheep can run abroad and feed upon half-dead grass, and some green plants which they select from among the remains of the herbage of the preceding year, there is little danger of their becoming costive, but when we have a long continuation of severe weather, and deep snow, it is otherwise, and sheep should be supplied with some kind of food that will prove a gentle laxative. Beets, turneps, cabbage, boiled potatoes and most kinds of boiled grain have the desired effect, and therefore should always be made use of during the severity of winter.

Some have proposed keeping sheep shut up in close buildings during the severity of winter; this I do not approve of, as when large flocks are so confined, the air becomes bad, and sheep are more liable to contract disease, than when allowed the open air, and yet are provided with a shelter from the storms. Although, I would have sheep provided with suitable yards and sheds, yet whenever the snow and weather will allow of it, I would recommend that sheep should be allowed to range during the day, but should be returned at night.—When a flock are allowed to remain in the fields during severe snow storms, it is natural for them to lie down under the lee side of fences, the very place where the greatest quantity of snow collects, and often, as in the deep snow of 1836, many are covered with the snow and perish. Sheep are desirable stock to keep upon a farm, when the husbandman has any regard to neatness. If you have a brush pasture to subdue, turn in sheep—if you wish your potatoes weeded, turn in your sheep—if you wish your summer fallow kept free from grass and weeds, turn in your sheep—if you wish your turnep patch to be in prime order, turn in your sheep—in short if you would be a good farmer, look well to your sheep.

Now sir, the object of this communication is not so much for your profit as my own. I am a young farmer and feel an anxiety not only to improve myself, in my profession, but to have my companions who are also young farmers, improving. This we cannot do so well in any way, as by a constant interchange of ideas—we must think, we must write, and we must read. Now I do not know of any work so well calculated for our improvement by perusal as the Genesee Farmer. We work our farms for profit, and who that has ever taken that paper, but will allow it has meted him an hundred fold. W. S. T.

South Venice, January 20th, 1839.

Baked Beans and Pork.

Mr. Tucker—I am a laboring man, and know what it is to work hard, and I also know on what kinds of food I can labor longest, or in other words, what food will stick by me the longest while at work. I do not pretend to understand the tables of nutrition which I understand the chemists have published; but I have a standard which is far more simple and conclusive than any I can find in books, and that is the amount of labor I can perform, on a given quantity of food of different kinds; and by my method of computation, baked beans and pork, stand at the head of the scale. I believe the chemists rank beans high, and so far they are certainly right; as any one will find that will try living on them when driven to hard work. The beans that I prefer are a small white bean grown in the field and fully ripened; and in default of these, the large white garden pole bean. These kinds are the best flavored, and equal in other good qualities to any others. In cooking beans do not put in so much pork as to have them swimming in grease, and so salt as to require a man to become an intemperate water-drinker to quench his thirst. The beans should be softened and swelled before they are put in the oven, a little water kept in the pan but not enough to drown them; the surface, when they are well managed, will look like a pan of parched corn, all cracked open and white, and when these are stirred in and a new surface of beans are exposed the same results will ensue. A dinner on such a dish of beans and pork is fit for any body; and if they are a week old, they are none the worse. Try it brother farmers and see. A Working Man.

THE GOLD VINE PEA.

Mr. Tucker—Those who are in the habit of growing field Peas are aware that the most frequent cause of failure of this crop, is the *mildew*, which attacks the vines about the commencement of bearing, stops their growth and prevents the pods from filling, besides rendering the straw worthless. This great evil, however, may now be avoided. *The Gold Vine Pea* is a handsome new field pea, from Canada, which derives its name from the bright yellow color of the straw, and has never been known to be affected by the mildew, although raised for several years, under the same circumstances and contiguous to common kinds which were greatly injured by it.

These facts are substantiated by the certificates of the growers and other respectable persons, who express the most unqualified assurance that they will not mildew in this or any other climate.

The Peas are for sale at the Rochester Seed Store, where the certificates may be examined.

M. B. Bateham.

Rochester, March 30th, 1839.

CULTURE OF THE SUGAR BEET.

Mr. Tucker,—As I am a subscriber to the Genesee Farmer, I will give you my experience in cultivating the sugar beet. Last spring I sowed about one acre.—The ground was well prepared, and marked for rows two feet apart from row to row, and the seed was put in with the thumb and finger at about from eight to ten inches apart in the rows. The seed was soaked previous to planting; a part of it was accidentally heated to what would be called scalding hot; this seed came up in less than four days. The seed planted was purchased at the Rochester Seed Store, for the white variety, but had some of the yellow and rose color mixed with it, which gave me an opportunity of testing their different qualities as to productiveness. Between the white and rose colored there was very little difference. I think the rose colored had not as many fine roots as the white; the yellow were more uniform in their shape, but were not more than one quarter as large. Of the white and rose colored, about from ten to twelve would make a bushel; of the yellow it would require four times that number. Owing to the drouth my crop was not as great as some that have been reported, being a little over five hundred bushels. I also transplanted about from six to eight thousand, these were not more than one quarter as large as those which were not transplanted, and besides they were not as well shaped, had more horizontal and fine roots. I sowed three and a half pounds of seed upon the acre, but am of the opinion, that had I put double the seed, it would have been more profitable. It is better to have five hundred plants to spare, than to be compelled to transplant fifty. I sowed half a pound of seed upon three rods of ground, in rows eighteen inches apart, which you will perceive is at the rate of more than fifty pounds to the acre, and I assure you, the produce was prodigious. They were thinned out, for transplanting, for family use, and fed to cows, and hogs, &c. I think the produce of this bed was worth to me at least ten dollars.

Yours respectfully, Hervey Johnson.

Waterloo, Dec. 18th, 1838.

The Bald Siberian Spring Wheat.

This valuable wheat was introduced into this vicinity from the neighborhood of the St. Lawrence, about one year ago, and I believe all those who have tried it the past season, prefer it before any other variety. A farmer in Wheatland sowed several acres of this kind in the same field with the *bearded* Siberian and the Italian, and informs me that it produced much better than either of those varieties, although the season was very unfavorable.

It is for sale at the Seed Store, together with the Bearded Siberian, Italian and Tea wheat.

M. B. Bateham.

IMPROVEMENT OF THE MIND—No. 4.

It has been said in this paper that *farmers cannot be induced to read.* To this assertion I cannot assent. I see indeed in the history of the past, why many farmers have not acquired the habit. Their own defective education and the want of suitable books in earlier years, is an adequate reason. But in the improvement of education and circulation of books on all subjects, and in the motives which press upon the young to elevate themselves by the increased power of mind, we may expect the result so much to be desired. We have known these motives to in many cases produce the most happy effects, and seen men whose early education had been very moderate, raise themselves by their own mental efforts far above the rank in which they began. To the younger farmers, and the sons of farmers, who are soon to carry on the labors and sustain the efforts and enjoy the honors of this blest art of agriculture, we continue to appeal. Prepare your minds for the noble place you may fill.

To elicit the attention and guide the practice of some, you are directed to a page in *Good's Book of Nature:*

"Matter, then, is the production of an Almighty intelligence, and as such, is entitled to our reverence; although from a just abhorrence of many ancient and not a few modern errors, it has too often been regarded in a low and contemptible light. Though not essentially eternal, as was contended for by all the schools of Greece and Asia, nor essentially intelligent, as was contended for by several of them, it evinces in every part and in every operation the impress of a divine origin, and is the only pathway vouchsafed to our external senses by which we can walk 'through nature up to nature's God,'—that God whom we behold equally in the painted pebble and the painted flower, in the volcano and in the cornfield, in the wild winter storm and in the soft summer moonlight. Although, when contemplated in its aggregate mass, and especially in its organized form, it is perpetually changing, it is every where perfect in its kind, and even at present bears indubitable proof of being capacified for incorruptibility. In its elementary principles it is maintained to be solid and unchangeable, and even in many of its compound forms, it discovers an obvious approach to the same character." "Water is as much a compound as any of the earths, yet we have strong reasons for believing that for the most part it exists unchangeably from age to age; and that its integrity has not been essentially interfered with from the commencement of the world. Its constituent parts have by no means been broken into, but continue the same, whether under a solid form, as that of ice; under its usual form, as that of a liquid; or under an elastic form, as that of a vapor; it is the same in the atmosphere as on the earth."

"A similar identity appears to exist in atmospheric air, which is, probably, at least as indestructible as water; for its composition, when purged of the heterogenous substances which are often combined with it, is the same in the deepest vallies as on the highest cliffs; at the equator, and at the poles; the earth's surface, and the height of 21000 feet above it."

"Gravitation is the attraction by which bodies of all kinds act upon each other, with a force regulated by the aggregate proportion of their respective quantities of matter, and decreasing as the squares of the distances increase. It is a power impressed on matter universally, and hence operates alike on the minutest and on the largest masses; produces what we call *weight* on earth, or the tendency of heavy bodies to fall towards the earth's centre; and governs the revolutions of the planets. The five principles which regulate its mode of action, and constitute its magnificent code of laws, are thus summed up by M. La Place:

1. Gravitation takes place between the most minute particles of bodies.
2. It is proportional to their masses.
3. It is inversely as the squares of the distances.
4. It is transmitted instantaneously from one body to another.
5. It acts equally on bodies in a state of rest, and upon those which, moving within its range, seem to be flying off from its power."

"Is this principle, says M. La Place, a primordial law of nature? or is it a general effect of an unknown cause? Here we are arrested by our ignorance of the nature of the essential properties of matter."

"As the book of revelation and the book of nature concur in telling us that the work of creation went on progressively, and under the influence of a code of natural laws, we are called upon to examine into the march of this marvellous progress by the laws of nature referred to, and to understand it by their operation. Nor is it more derogatory to Him, with whom a thousand years is as one day, and one day as a thousand years, to suppose that He allotted six hundred or six thousand years to the completion of his design, than that he took six solar days for the purpose; and certainly there is something far more magnificent in conceiving the world gradually to have attained form, order and vitality, by the mere operation of powers communicated to it in a state of chaos, through a single command, which instantly took effect, and commenced, and persevered, and perfected the design proposed, than in conceiving the Almighty engaged in personal and continuous exertions, though for a more limited period."

"Thus, in progressive order, up rose the stupendous system of the world: the bright host of morning stars shouted together on its birth day, and the eternal Creator looked down with complacency on the finished fabric, and 'saw that it was good.'" *

CULTURE OF SILK.

There are few subjects destined to excite greater interest in this country than the Culture of Silk. Among agriculturists of science, it has already become a settled point that Silk may not only be manufactured in this country, but that its manufacture may be made a source of immense profit. It is not surprising, therefore, that, in view of this *last* consideration, American enterprise should have seized upon the Mulberry Tree and Silk Worm, as instruments of wealth. The only thing surprising, in relation to it, is, that commodities so susceptible of being turned into gold, should have so long escaped the observation of Yankee shrewdness. But, as in every thing else, so in this department of National Wealth, "*better late than never.*" If the culture of Silk is taken hold of now, with spirit, although the time already lost may not be regained, the loss of further time will be prevented.

For the purpose of having this subject brought directly before every farmer in Western New-York, we make haste to publish, in our present number, the very able Report of the Agricultural Committee of the Assembly, which was read to that body on the 26th ult., by Mr. C. E. Clark. It contains facts which should be known to every one, and which cannot fail to stimulate to the culture of the commodity whose value it lauds.—*Roch. Democrat.*

Mr. C. E. Clark, from the committee on agriculture, to which was referred the numerous petitions asking aid and encouragement in behalf of the culture of the mulberry, and the growth and manufacture of silk,

REPORTS:

That the committee are satisfied that the mulberry—the leaf of which furnishes the only good aliment for the silk worm—will flourish in most, if not all, the counties of this State; that it will grow on a light and comparatively barren and sandy soil, and furnishes a better food for the worm than when grown upon more fruitful land.

The committee are also satisfied that the climate of this State is well adapted to the growth of the silk worm; and that the raw American silk is stronger, more glossy and valuable than any which is imported;

That a nursery of trees may be raised from the seed, or from cuttings, so that in three years, the growth of silk may be successfully begun;

That the weeding the young trees—the gathering of the leaves—the feeding and tending the silk worms, and the reeling and manufacturing of silk, will furnish a healthy, pleasant and profitable employment for boys, when too young to put to the more laborious departments of farming or mechanical pursuits; for young women, and also for the aged and decrepit.

The committee further take leave to say, that the carding machine, the spinning jenny, power loom, and various other labor saving machines which this inventive age has created, have monopolized much of that work which the industrious hand of women formerly performed, and that no adequate, agreeable, pleasant and profitable employment has been substituted in its room.

The committee are of the opinion that the culture and manufacture of silk, will furnish to this class more than an adequate return for the employment it has lost, and will enable every father, with a small piece of land, to provide a pleasant, tasty and profitable employment for his daughters at home.

This consideration alone the committee look upon as of vast importance. The daughter should, if possible, arrive at mature years, before she leaves the watchful care of her mother. She should also, if possible, be provided with the means of an independent and honorable livelihood by dint of human exertions, as well for the purpose of developing her physical powers—the symmetry, strength and beauty of her person, as for creating that moral force and independence of character, which will prepare her to make a good wife, or to live single, without dependence and without reproach.

The committee would further report that the people of the United States import annually, for home consumption, silks to the amount of *twenty millions of dollars*, by far the greater part of which might, in a very few years, be raised and manufactured at home, and no profitable labor be abstracted from its present direction, and our other productions very little diminished.

We are, to a great extent, an agricultural people—about eight-tenths of our whole population being devoted to rural pursuits, and still all our exported agricultural productions (except tobacco and cotton,) fail to pay one-half of the first cost of this single article of silk.

Official returns show, that, in the year 1834, all the beef, tallow, hides, butter, cheese, pork, lard, and domestic animals exported—all the flour, corn, wheat, and every species of seed, and grain, and vegetables of every name except cotton and tobacco, amounted to only $10,673,136, and in 1837, to only $9,326,834—less than one-half the amount which in those same years, were paid for one single article of imported luxury.

The fact is calculated to alarm, and should admonish us of our past folly and future duty.

The committee think it is not to be endured, that an agricultural people should import an article of luxury, still less of necessity, which its own soil can produce; that it is not to be endured, that the densely populated lands of India and Europe, should grow the mulberry for America, or that the fair daughters of this western world, should depend on French, Italian or Indian industry and skill for their useful or ornamental dresses; and if the committee were clothed with the power, they would establish such a tariff on imported silks, as would in effect say, to the women of America, *that they might wear silk when they wove it.*

The committee have looked in vain for the wisdom and patriotism of that law and the late construction thereof (worse than the law itself,) which admits not merely silks, but ready made clothing of silk texture, duty free—a law which admits the labor of the European operative—the human automaton, to compete, on even terms, with the free labor of the American citizen.

This is not the way to succeed with the culture of a tree of which we know little, and in a high branch of mechanic art, where we have but little skill and still less experience. It costs more to feed, clothe and educate an American citizen, than it does four of these foreign operatives, and therefore it is impossible for them to labor as cheap, and hence the difficulty of competing successfuly in the manufacture of those things, the chief value of which consists in the labor bestowed upon them, and hence the necessity of a protective tariff—hence the continued strife, the untiring ingenuity of the inventors *of labor saving machinery.*

The growing of cotton could hardly have become profitable, except for the invention of our countryman Whitney. With the aid of the cotton gin, the cotton is cleared of its seeds, ten times easier than by the Hindoo hand, a protective tariff and an improved machinery, has enabled the manufacture of coarse cotton to successfully compete with the looms of England.

Our success in the growth and manufacture of cotton, encourages the belief that similar success will attend the growth and manufacture of silk; and a late invention of one of the members of this committee (Mr. Bergen, of Brooklyn) in the weaving of silk it is thought will effect more for the weaving of silk than the power loom has for cotton, and the committee hail this invention as a harbinger of success in the culture and manufacture of silk.

The history of the introduction of new plants, new animals, new sources of profitable industry, is nothing less than the history of civilization and refinement. The introduction of a single vegetable (the potatoe) from America into Europe, increased the capacity of the old world, to sustain a population more dense by one-third, and banished for ever the fear of famine.

The introduction of the culture of cotton into the United States, furnished a new era in our history. The culture of this plant has saved the cotton growing states from poverty, and, perhaps, from ruin. This valuable plant was first raised by the way of experiment, and a sample sent by Richard Leake, Esq., to Thomas Proctor, in Philadelphia, in the year 1788.

Previous to 1799, the United States had never exported a pound of cotton. In the celebrated Report of Ger. Hamilton, the Secretary of the Treasury, in 1790, on the productions and resources of the United States, no mention is made of cotton.

Fifty years have not yet elapsed, and behold! cotton is the most valuable of all our vegetable productions.—It is within the life of many of the members of this Assembly, that the first cotton seed germinated in America. We now export, of cotton cloths manufactured at home, the value of $2,000,000 annually. We manufacture for home consumption, the value of $45,000,000 annually, and we annually export, of raw cotton, the value of $60,000,000. Thirty years ago, we sent

annually to India about $6,000,000 of specie to purchase cotton cloths; and the cloths were twice as dear, notwithstanding the vast expansion of the currency, as they are now.

Such is the effect—such the vast result of the introduction of a single new plant. Such the effect of well directed and properly protected domestic industry.

While admiring this most flattering result, we are encouraged in our hopes and confidence in our opinion, that the introduction, culture and manufacture of silk, will form an epoch as important as the introduction of cotton; and verily believe, that forty years hence, the benefits of its culture will be as sensibly felt, and perhaps of as great pecuniary moment as the culture of cotton.

Ten of our sister States have thought it advisable to encourage the culture and manufacture of silk by legislative bounty, for a *limited* period, and the committee are of opinion that if we hearken to the admonitions of experience, or are influenced by example, this legislature will do the like.

In accordance with these views the committee have prepared a bill, which they ask leave to introduce.

The bill provides that upon the first week in September, the supervisors of the towns, shall meet to weigh the cocoons and reeled silk presented for a bounty. The bounty is recommended to be as follows:

For every lb. of dry cocoons, ...20 cts.
" " " " reeled silk,.....50 cts.

The bill is abundantly guarded.

Meadows and Grass Lands.

If you have the means, your meadows and grass lands should be top-dressed as early this month [March or April,] as possible, with stable manure, well rotted dung, compost, or ashes, and if you have neither one nor the other of these resources to spare, three or four bushels of salt to the acre will be found useful, except to *clover*, on which a bushel of *plaster* per acre will be better. By all means, do not omit to plaster your clover fields as soon as leaves attain the size of an eleven penny bit.

The following proportions of grass seed to the acre, it may not be amiss to annex:

Clover, when sown alone,.....12 pounds.
Timothy,..... 1 peck.
Herds Grass,..... 1 bushel.
Orchard Grass,..... 2 bushels.
Rye Grass,..... 2 bushels.
Burnet,.....20 pounds.
Lucerne,..... 8 pounds.

For a pasture for grazing the following mixtures of seed, would be found excellent, viz: 6 lbs. of *Clover* seed, 1 peck of Herds grass, and half a bushel of Orchard grass, seed—or 6 lbs. *Clover*, half a bushel of Rye grass, and half a bushel of tall meadow oat seeds.

For seeding a *park* or *thinned wood*, the following would be best: 4 lbs. of *Kentucky Blue Grass Seed;* 6 lbs. of clover seed, and half a bushel of Orchard grass, the two latter would protect the former the first year, add to the quality of the pasture the second season, and gradually resign their places to the first, which would, in the end, like a successful general, be sure to possess itself of the field, and form in the end the best of all woodland pastures; but as it delights in *lime-stone* land, should the spot allotted for its culture not have *lime* in its bosom, a few bushels to the acre, say four or five, should be sown on it.—*Far. and Gar.*

Seed Store Agencies.

GENERAL assortment of Garden, Field and Flower Seeds, put up at the Rochester Seed Store, may be found at the following places; and printed Catalogues can be had on application:

Buffalo..W. & G. Bryant.	Nunda..W M. Chipman.
Lockport..S. H. Marks & Co.	Canandaigua..B. F. Clark.
Albion..Rathbone & Clark.	Geneva..J. N. Bogert.
Brockport..Geo. Allen,	Waterloo..Abram Deuel.
Batavia..J. V. D. Verplanck.	Auburn..Horace Hills.
Le Roy..Tompkins & Morgan.	Palmyra..Hoyt & May.
Attica..R & N. Wells.	Newark..E. B. Doane.
Perry..L. B. Parsons & Son.	Syracuse..T. B Fitch & Co.
Genesco..J. F. & G. W. Wyman.	Utica..J. E. Warner.
Mt. Morris..R. Sleeper.	Oswego..(will be supplied soon.)

All the ordinary kinds of seeds are put up in small papers as usual, and those kinds mostly wanted in larger quantities, are put up in packages by weight. Persons wishing other kinds, or larger quantities, may leave their orders with the agents and the articles will be forwarded.

The character of these seeds is now generally known, and the increased demand for them is their best recommendation, But for the benefit of those agencies that are newly established, I would say, that if these seeds, on fair trial, do not prove superior to those generally hawked through the country, I shall be satisfied that *seven year's experience* has failed to teach me the trade, and will quit the business. M. B. BATEHAM.

Rochester, N. Y., April 1st, 1839.

☞ Subscriptions for this paper will be received by all the above named agents of the Rochester Seed Store.

Morus Multicaulis.

FOR SALE—One thousand five hundred genuine Morus Multicaulis trees, with cuttings on them; they are of thrifty vigorous growth, the wood well ripened. They are choice trees.

Also, 10,000 Morus Multicaulis cuttings for sale, if applied for soon.

Fruit and Ornamental Trees, Shrubs, Green House Plants, &c. for sale as usual. ASA ROWE.

Greece, Monroe Co., March 7th, 1839. m1tw6t

Durham Stock and Seed Wheat.

FOR SALE.—A full blood two years old Durham Bull—Also, Italian Spring Wheat, raised by the subscriber.

Rochester, April 4th, 1839. [ap62t*] WM. PITKIN.

To Farmers.

PRODUCE STORE.—The subscriber has removed his Store from the corner of Exchange and Buffalo sts., to No. 33 Exchange st., near the Canal. Where he will pay cash and the highest prices for Timothy and Flax Seeds, Corn, Oats, White Beans, Pork, Butter, Lard, Hams, &c.

Just received, a superior quality of Large, Medium, and Small Clover Seed, and a quantity of clean Timothy Seed.

Farmers are respectfully invited to give him a call before purchasing or disposing of the above articles elsewhere

SIMEON P. ALCOTT,

Rochester, April 4th, 1839. [6t] Agent.

Improved China and Berkshire Pigs.

THE subscriber keeps constantly on hand and for sale the above very superior hogs. They are the very choicest kinds of England and America, and are universally preferred by all who pay the least attention to the improvement of their stock.

The Berkshires are large, easily weighing 400 to 600 lbs., according to keep, at 18 months old, and grown hogs of this breed have been sold the past year in Kentucky from $200 up to $500 per pair. The China are a smaller race and much finer in their points than the Berkshire, and weigh at 18 months 300 to 400 lbs. They are celebrated for the delicacy of their meat, easiness to keep, and aptitude to fatten, and for producing a more rapid improvement in crossing with the common hog than any other breed known.

If called upon, the subscriber will give the most satisfactory reference of the perfect purity in blood of the above animals, and the superiority and care of his breeding, and residing as he does at the great shipping port of the lakes, Western gentlemen, in addressing their orders to him, will make a considerable saving in the charges of feed and transportation.

Prices of Berkshire pigs per pair, 6 to 8 weeks old, caged and shipped,.....$20 00
China do.,.....15 00

When taken at the farm without box, $2 per pair less will be charged. Crosses of the above with each other called the Tuscarora, and in England the Tonkay breed, at 15 to 20 dollars per pair.

Pigs will not be considered as engaged unless the amount of them is remitted at the time of ordering, or reference given. *Address, post paid,* A. B. ALLEN.

Buffalo, March, 1839.—mar 9-m3t w9t

New Arrangements.

THE subscriber would respectfully inform the public, that he has taken the entire management of the Rochester Seed Stoe. Having had seven years' experience in the business in this place, he flatters himself that his knowledge of the wants of the community, and his facilities for supplying those wants, will enable him to give the fullest satisfaction, and secure for the establishment a continuance of that public confidence and liberal patronage which it has hitherto received.

He has now on hand a very large assortment of English and American Garden, Field and Flower Seeds, of the best kinds and latest growth, and several tons weight additional will be received direct from England on the opening of navigation.

The regular agents for the establishment will be supplied immediately.

Catalogues may be had gratis on application.

Rochester, March 1st, 1839. M. B. BATEHAM.

Holland's Improved Silk Spinner.

THE attention of Silk Manufacturers is invited to the recent invention of an improved Silk Spinner, by Mr. Harrison Holland of this town, for which he has obtained letters patent. It is thought to possess many advantages over any machine now in use for the same purpose By its peculiar construction, it can be moved by hand, steam or water power,—and doubles, twists and spins the silk at one operation. For family use, or persons wishing to manufacture silk in a small way, it is undoubtedly the best invention in use, while it is equally well adapted for factories on the most extensive scale.

A machine in full operation may be seen, or for a more particular description of it reference may be had to a Circular published by the subscribers, which can be obtained by any one upon application either to HARRISON HOLLAND, or STODDARD & LATHROP.

Northampton, Mass. Feb. 27. mar 9-f6t

WM. PRINCE & SONS will make sales of trees and cuttings of the genuine Chinese Morus multicaulis, Morus Expansa, Alpine, Broussa, Canton, and other varieties, deliverable to the purchaser at such period in the spring as is convenient to them, and will enter into contracts accordingly. Prices and terms for the trees and cuttings will be forwarded to all who may apply for them by mail, as well as prices of Silk Worm Eggs, Mulberry seed, &c. The Multicaulis Trees are remarkably vigorous, and as we first imported the genuine tree, purchasers are sure of obtaining the true kind. It is from this cause and from the great attention paid by them, that the trees they have sold have given universal satisfaction.

N. B. Fruit and Ornamadtal Trees, Plants and Seeds, can be supplied to any extent, and all articles will be packed so as to support any voyage and be forwagded in the most careful manner.

Flushing, near New York, Feb. 12, 1839. feb 23-10t

Morus Multicaulis.

FOR SALE—1,000 genuine Morus multicaulis.
10,000 cuttings do. do.
100,000 Silk Worm Eggs.

ELLWANGER & ROGERS, Florists and Nurserymen, offer at wholesale and retail, a general collection of Green house and Hardy, Herbaceous Plants, Fruit and Ornamental Trees, Shrubs, Vines, Bulbous Roots, &c. &c.

Green-house corner of Buffalo and Sophia-streets, Rochester New York. March 9-3t

Books for Farmers.

CHAPTAL'S Agricultural Chemistry, price $1 25.

A Treatise on Cattle, their breeds, management and diseases, price $2 50.

The First Volume of the Genesee Farmer, bound, price $1 50.

The Farmers' Own Book, price 50 cents.

The American Farriery, price 75 cents.

Feb D. HOYT.

Genuine Morus Multicaulis.

THE subscriber has still for sale, one thousand genuine Morus multicaulis, of thrifty growth and untrimmed. They are choice trees, selected for their size, and will afford a large quantity of cuttings. ASA ROWE.

Greece, October 27th, 1838.

Cleveland City Seed Store,

AND WESTERN RESERVE AGRICULTURAL REPOSITORY, No. 91 SUPERIOR STREET, CLEVELAND, OHIO.

The subscriber, in introducing to the Public notice, the above establishment for its second year, takes pleasure in being able to state that from the apparent good feeling entertained of the advantages of such a Store to the State of Ohio, and the neighboring, States, he has greatly extended its sphere of usefulness, by adding to it a much more general assortment of all the valuable varieties of CLOVER, GRASS, ESCULENT ROOTS, and FIELD SEEDS, GARDEN, FLOWER, SHRUB and TREE SEEDS. And he has made such arrangements with his connections in Europe, as will ensure the early introduction into Ohio, of all new and desirable varieties that will be suited to this climate, and that he will invariably continue to offer only imported seeds that have been confirmed by experience to be better adapted to our use, than the same varieties raised in America. He particularly calls attention to his choice stock of GARDEN AND FIELD PEAS, TURNIPS, RUTA BAGA, SUGAR BEET, and MANGEL WURTZEL SEEDS—all imported from the best Foreign sources. He has added an AGRICULTURAL IMPLEMENT DEPARTMENT, consisting of Ploughs of various patterns, also Plough Castings, Cultivators, Drill Barrows, Hay and Straw Cutting Machines, Root Slicers, Harrows, Scythes, Cradles, Reaping Hooks, Rakes, Forks, and Grindstones of superior fine grit, Garden Tools, as Spades, Rakes, Hoes, Garden Lines, Pruning Hooks, Knives and Chissels, Budding Knives, Watering Pots, &c. And a MISCELLANEOUS DEPARTMENT, consisting of Farming and Gardening Books, Silk and Beet Sugar making, Bulbous and Dahlia Roots, (Green House and Parlor Plants in the season,) Strawberry Plants, Raspberry Canes, Sweet Potatoe-Sets, Rhubarb or Pie Plant Roots, Asparagus Roots, Cauliflower, Cabbage, Egg and Tomato Plants and Sutton's Double Dasher Churns, Improved Copper Pumps, Silk Reels, Silk Worm Eggs, and the genuine Morus Multicaulis or Chinese Mulberry Trees and Cuttings, with numerous other notions calculated to make the establishment deserving extended patronage; and the public may rely on being supplied with as PURE and GENUINE SEEDS as can be found in the eastern cities, New York not excepted. The subscriber desires no other confidence or patronage than what is fully merited, and as the establishment of a business of this nature is of considerable importance to aid the developement of the resources of the soil, he hopes the enterprise will be patronized far enough to make it a mutual benefit to him and the public. Ample support is necessary this year to ensure its continuance hereafter, and J. H. takes this opportunity of returning thanks to the public for past favors, and assures them, that their earnest desire to see it succeed, shall be more than equalled by his indefatigable exertions to deserve it. A liberal discount allowed to Retail dealers and Pedlars, and in no case will Seeds be sent out on commission. Catalogue of Vegetable, Flower and Field Seeds can be had gratis, on application to

JAMES HOUGHTON,
General Agent.

CLEVELAND CITY SEED STORE,
February 26, 1839. mar 9-f5t

Morus Multicaulis Cuttings.

THE subscriber can furnish 10,000 genuine Morus Multicauli Cuttings if applied to soon. E. H. MIX.

Avon, Livingston Co., N. Y. an26-3m

Fruit Trees for Sale.

THE subscriber respectfully informs his friends and the public tha he has for sale at his Nursery in Rochester, Monroe county state of New York, a large quantity of Fruit Trees, grafted and inoculated with the most approved kinds, now fit for transplanting. which he will sell on the most reasonable terms.

April 15, 1838. SAMUEL MOULSON.

N. B. Cash will be paid for a few thousand two years old APPLE REES.

For Sale.

A SMALL FARM, finely situated, and of uncommon productiveness, near a large village on the Erie Canal, and admirably adapted to the dairy business and marketing. For further particulars, and terms, inquire at this office. Dec. 29--tl

Morus Multicaulis.

A FINE lot for sale; also, a few English Hawthorn of large size, a very desirable lot, by S. MOULSON,

February 27. Front-street.

Monroe Horticultural Garden and Nursery,

GREECE, MONROE COUNTY, N. Y.

THIS establishment now comprises over 20 acres, covered compactly with trees and plants in different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, Splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired, delivered on the Canal, one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant, gratis, or may be had by calling at the office of the Genesee Farmer

April 1, 1838. ASA ROWE.

Rochester Seed Store, 1839.

REYNOLDS & BATEHAM, the proprietors of this well known establishment, respectfully announce that they have again on hand a fine assortment of English and American SEEDS, of the latest growth, including all the most valuable and newly introduced articles of garden and field culture—Grain, Grass, Esculent Vegetable, Tree, Shrub, Herb and Flower Seeds. Also, a large collection of Garden Tools, Agricultural and Horticultural implements, Books, &c. and a splendid collection of Green House Plants.

The liberal and constantly increasing patronage which this establishment has received during the past four years, is a gratifying evidence that its usefulness is in a measure appreciated by an intelligent community, and that the efforts of the proprietors to give satisfaction have not been unsuccessful. Great pains are taken to have all articles sold at this establishment of the very best quality, and the proprietors hope, by unremitted exertion, together with their experience in the business, and facilities for growing and importing supplies, to merit the fullest confidence of the community, without which they do not ask or expect a continuation of its liberal patronage. Merchants and others supplied with superior Seeds either by weight at wholesale, or neatly put up in small papers for retailing, at prices which will afford them a handsome profit. Small Assortments will not be furnished on commission, but an agency is, or will be established in each of the principal villages in Western New York, where a full assortment will be left for sale.

A Catalogue of 42 pages may be had on application.

REYNOLDS & BATEHAM,

No. 3 & 5 Arcade Hall, Rochester, N. Y., Jan. 1st, 1839.